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(54) Title: BIO-SYNTHETIC MATRIX AND USES THEREOF

(57) Abstract: A bio-synthetic matrix comprising a hydrogel which is formed by cross-linking a synthetic polymer and a bio-polymer is provided. The matrix is robust, biocompatible and non-cytotoxic and is capable of supporting cell in-growth *in vivo*. The matrix can be tailored to further comprise one or more bioactive agents. The matrix may also comprise cells encapsulated and dispersed therein, which are capable of proliferating upon deposition of the matrix *in vivo*. Methods of preparing the bio-synthetic matrix and the use of the matrix *in vivo* for tissue engineering or drug delivery applications are also provided.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C08F220/54 C08F246/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08F A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

PAJ, WPI Data, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	WO 92 20721 A (KAO CORPORATION) 26 November 1992 (1992-11-26) the whole document ----	1-50
Y	US 2001/003126 A1 (W. M. RHEE) 7 June 2001 (2001-06-07) cited in the application page 2, paragraph 32 -page 6, paragraph 96 column 8, paragraph 118 -column 10, paragraph 151; claims 1-65 ----- -/--	1-50

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	EP 0 230 898 A (CELANESE CORPORATION) 5 August 1987 (1987-08-05) claims 1-16	1
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